

IN THE CLAIMS

Claim 1 – Claim 24 (cancelled)

Claim 25 (New): An image processing apparatus, comprising:

an image data generation unit that generates an image data including an image element based on a document data, the document data including link information that indicates a location of related information related to the image element and appearance information that defines a position of the image element in the image data;

an embedding data generation unit that receives identification information corresponding to the link information and is smaller than the link information in data size, and configured to generate a control data to embed the identification information by superimposing over the position of the image element based on the appearance information; and

an embedded image formation unit that generates pixel data to be formed on a recording medium based on the image data and the control data, the pixel data including the identification information superimposed over the position of the image element.

Claim 26 (New): The image processing apparatus according to claim 25, wherein the link information is URL.

Claim 27 (New): The image processing apparatus according to claim 25 further includes an image forming unit that forms the pixel data on the recording medium in a state that the identification information is accessible by a user.

Claim 28 (New): The image processing apparatus according to claim 25 further includes an identification information management unit.

Claim 29 (New): The image processing apparatus according to claim 28, wherein the embedding data generation unit extracts the link information from the document data, registers the extracted link information in the identification information management unit, and receives the identification information corresponding to the link information from the identification information management unit in response to the registration.

Claim 30 (New): The image processing apparatus according to claim 25, wherein the embedded image formation unit generates the pixel data in a form or in a color that is difficult to identify the identification information visually.

Claim 31 (New): An image processing method, comprising:

generating an image data including an image element based on a document data, the document data including link information that indicates a location of related information related to the image element and appearance information that defines a position of the image element in the image data;

receiving identification information corresponding to the link information that is smaller than the link information in data size;

generating a control data to embed the identification information by superimposing over the position of the image element based on the appearance information; and

generating pixel data to be formed on a recording medium based on the image data and the control data, the pixel data including the identification information superimposed over the position of the image element.

Claim 32 (New): The image processing method according to claim 31, wherein the link information is URL.

Claim 33 (New): The image processing method according to claim 31 further comprising forming the pixel data on the recording medium in a state that the identification information is accessible by a user.

Claim 34 (New): The image processing method according to claim 31, further comprising:

- extracting the link information from the document data;
- registering the extracted link information; and
- receiving the identification information corresponding to the link information in response to the registration.

Claim 35 (New): The image processing method according to claim 31, wherein the generating the pixel data to be formed on the recording medium includes generating the pixel data in a form or in a color that is difficult to identify the identification information visually.